

EXECUTIVE SUMMARY

Where is the project located and what is the purpose of this project?

The project is located in Layton City, Utah, adjacent to the I-15 corridor. Layton City, which is 15 miles south of Ogden and 25 miles north of Salt Lake City, is located in Davis County. A regional map showing the location of Layton City with respect to other Utah locations is seen in Figure ES-1. The project study area is shown in Figure ES-2 on the following page.

The purpose statement of this project is three-fold:

1. Address current and projected traffic demand and operations for the South Layton Interchange (I-15 Exit 330),
2. Provide unrestricted access across the Union Pacific Railroad (UPRR) to the developing area of west Layton, and
3. Provide adequate transportation facilities and traffic capacity west of I-15 to relieve existing and projected traffic congestion by providing as near to level-of-service (LOS) D as possible or better on Gentile Street.

Project area improvements are necessary because residential development is expected to continue to grow west of the UPRR in Layton City, Kaysville, and Syracuse, bringing with it higher traffic demand and a need for improvement to the traffic capacity of the street network. The current configuration of the Layton Interchange does not safely meet the current and future traffic demands and the at-grade railroad crossing presents a safety hazard, which will increase with the anticipated growth of vehicle, rail, and pedestrian traffic.

What major actions have been proposed by other governmental agencies within the area?

There are three major proposed projects that are being studied or are under construction in the Layton area. They include the following:





Figure ES-2. Project Study Area

- **Weber County to Salt Lake City Commuter Rail EIS** (completed 2005): The Utah Transit Authority (UTA) in conjunction with the Federal Transit Administration has prepared an EIS for the construction of a commuter rail line that would extend 44 miles from Salt Lake City to Pleasant View (Weber/Box Elder County Line).
- **I-15 Davis County Lane Gain** (currently in design phase): The Utah Department of Transportation (UDOT) has prepared a State Environmental Study for a freeway widening project for the I-15 corridor between Glover Lane in Farmington and Gordon Lane in Layton City.
- **North Legacy Transportation Corridor Study** (final report completed August 2001): The Wasatch Front Regional Council (WFRC), in conjunction with UDOT, has prepared a corridor study to evaluate a transportation corridor between approximately 5100 West at the Davis/Weber County line to approximately 4000 North near the Weber/Box Elder County line.

What alternatives were considered?

Several solutions were identified and screened for their ability to meet the "Purpose and Need" of the project. The alternatives include: the No-action Alternative, the Transportation System Management/Transportation Demand Management (TSM/TDM) Alternative, the Transit Alternative, the TSM/TDM/Transit Alternative, and five build alternatives (which included 26 different variations). See Figure ES-3.

- **No-action Alternative:** assumes that all master-planned roads, transit projects and improvements discussed in regional and local plans will be constructed by 2030
- **TSM/TDM Alternative:** includes improvements to traffic flow by improving signal coordination, encouraging ride sharing, encouraging employers to have flexible employment hours, etc.
- **Transit Alternative:** includes improvements to the public transit system only
- **TSM/TDM/Transit Alternative:** combination of the TSM/TDM and Transit Alternatives
- **Alternative 1:** widen 200 North in Kaysville and improve the existing partial interchange on I-15
- **Alternative 2:** construct a new interchange at Milepost #330, build a new roadway from Fort Lane to Flint Street, and remove the existing partial interchange on I-15
- **Alternative 3:** widen Gentile Street, construct a full interchange on I-15 at Gentile Street, and remove the existing partial interchange on I-15
- **Alternative 4:** widen Gentile Street, build a partial interchange on I-15 at Gentile Street, and improve the existing partial interchange on I-15
- **Alternative 5:** improve the Layton Hills Mall Interchange, widen Hill Field Road, and improve the existing partial interchange on I-15

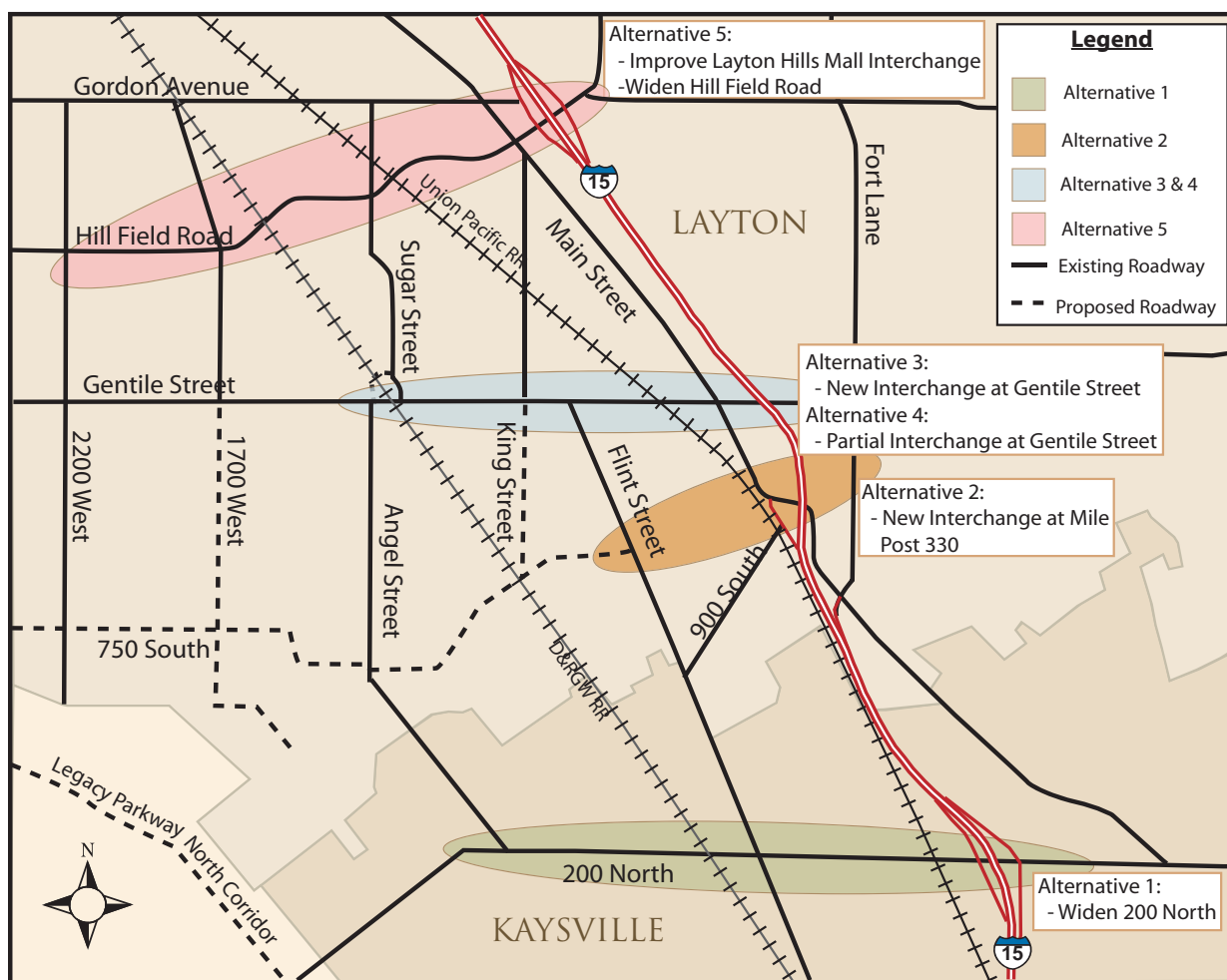


Figure ES-3. Summary of Build Alternatives

Why were some alternatives eliminated from further consideration?

The lead agencies, the participating agencies, and the general public were all involved in the development and evaluation of the alternatives. The alternatives were evaluated based on 1) their ability to meet the Purpose and Need for the project; and 2) their comparative impacts to critical resources. Those that did not meet the Purpose and Need or that had higher comparative impacts to critical resources were eliminated from further consideration.

Purpose and Need Screening

The TSM/TDM, Transit, and TSM/TDM/Transit Alternatives could not meet the "Purpose and Need" of the project. These three alternatives failed to address current and projected traffic demand and operations for the Layton Interchange, provide unrestricted access across the UPRR, or provide adequate transportation facilities and traffic capacity west of I-15 and were eliminated from further study.

Similarly, the No-action Alternative did not meet the "Purpose and Need," but was advanced since it is required by NEPA for the No-action Alternative to be carried through the environmental study as a baseline for all other alternatives.

To evaluate the alternatives for their ability to meet the projected 2030 traffic demand for the Layton Interchange and to provide as near to LOS D as possible on Gentile Street, a traffic analysis was conducted. See the Traffic Study Report in Appendix B and the Alternatives Development and Screening Memo in Appendix A. The traffic analysis was conducted in two phases; corridor operation and intersection operation.

Based on the corridor traffic analysis, Build Alternatives 1 and 5 would not relieve projected congestion by providing LOS D or as near as possible on Gentile Street. Therefore, Build Alternatives 1 and 5 both fail to meet the Purpose and Need for the project and were eliminated from further consideration.

Based on the results of the intersection analysis, Build Alternative 3 was eliminated from further consideration because it would not be able to provide an acceptable LOS for the Main Street/Gentile Street intersection, which is a major intersection in the project area and vital to achieving the Purpose and Need for the project. Therefore, Build Alternative 3 failed to meet the Purpose and Need for the project and was eliminated from further consideration.

Build Alternatives 2 and 4 met the Purpose and Need for the project and were therefore advanced to the critical resources screening.

Critical Resources Screening

Alternatives 2 and 4 were able to meet the "Purpose and Need" for the project so they were evaluated for impacts to critical resources, which for this project was determined to be Section 4(f) resources. (Section 4(f) [of the Department of Transportation Act] protects public parks, recreation lands, wildlife refuges, and historic sites.) Because of the substantial number of impacts that Alternative 4 would have to Section 4(f) historic resources (from 38 to 54 impacts depending upon the alignment used) and the quality and historical importance of the resources that would be affected, it was eliminated from further study. Alternative 2 was found to have only minimal impacts to Section 4(f) resources (six impacts), with potential mitigation to minimize and/or offset some of these impacts. A summary of the screening process for the Layton Interchange EIS is shown in Figure ES-4 and Table ES-1. See Chapter 2 - Alternatives Screening and the Alternatives Development and Screening Memo in Appendix A, as well as Chapter 4 - Section 4(f) Evaluation for more information.

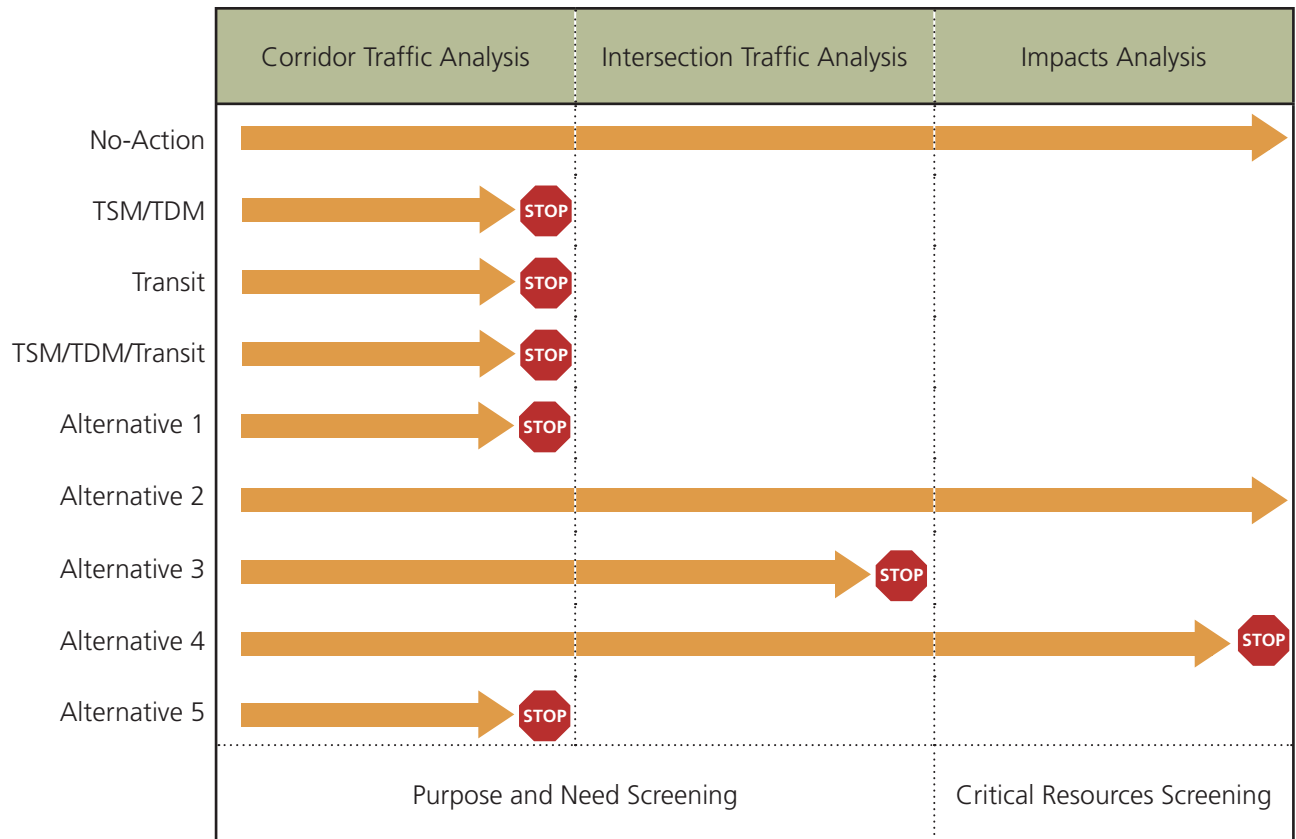


Figure ES-4. Results of the Screening Analysis

Table ES-1. Summary of Alternatives Screening Process Results

Alternatives	Ability to Meet Purpose and Need For Each Element			Critical Resources
	Layton Interchange Operations	Unrestricted Railroad Crossing	As near to LOS D as possible on Gentile Street	
No-action	No	No	No	0
TSM/TDM	No	No	No	NA
Transit	No	No	No	NA
TSM/TDM/Transit	No	No	No	NA
Build 1	No	Yes	No	NA
Build 2	Yes	Yes	Yes	Minimal impacts (6)
Build 3	No	Yes	No	NA
Build 4	Yes	Yes	Yes	Substantial Impacts (38-54)
Build 5	No	Yes	No	NA

*Highlighted rows indicate the alternatives to be analyzed in this EIS.

Alternative 2 (the Preferred Alternative) and the No-action Alternative will be examined in further detail in the EIS as to their relative impacts on both the human and natural environment in Chapter 3 - Affected Environment and Environmental Consequences and Chapter 4 - Section 4(f) Evaluation.

What is the Preferred Alternative?

Build Alternative 2 was selected as the Preferred Alternative due to its ability to meet the Purpose and Need for the project by addressing the current and projected traffic demand and operations of the Layton Interchange, providing unrestricted access across the UPRR to the developing area of west Layton, and providing adequate transportation facilities and traffic capacity west of I-15 to relieve existing and projected traffic congestion by providing as near to LOS D as possible or better on Gentile Street. It would also have the least impacts to critical resources of the alternatives considered that would meet the "Purpose and Need." **The final selection of the Preferred Alternative will not be made until the alternatives' impacts and comments on the draft EIS and from the public hearing have been fully evaluated.**

The Preferred Alternative includes the following major components. Components 1 through 6 can be seen in Figure ES-5 and components 6 and 7 can be seen in Figure ES-6.

1. Removing the existing partial Layton Interchange
2. A full interchange over I-15 at Milepost 330
3. A new five lane roadway from Fort Lane to Flint Street (750 South connection)
4. A grade-separated railroad overpass over the UPRR as part of the new interchange
5. Widening Main Street at the Gentile Street intersection to three travel lanes in each direction with two left-turn lanes going south, one left-turn lane going north, and one dedicated right-turn lane in each direction; also adding one left-turn lane and one dedicated right-turn lane on Gentile Street in each direction at the Main Street intersection
6. Removing the existing at-grade railroad crossing at 900 South
7. Providing signalized intersections at Flint Street, Main Street, and Fort Lane on the 750 South connection

The 750 South connection would extend from Flint Street to Fort Lane (about 0.8 miles in length) and consist of a five lane typical section. Main Street would be improved from approximately 1000 feet north of Gentile Street to the existing I-15 southbound on-ramp and consist of a typical section with three travel lanes in each direction and a raised center median. See Chapter 2 - Alternatives Screening for more specific details. All improvements are contained within Layton City.

BUILD ALTERNATIVE 2 (2G) - NEW INTERCHANGE

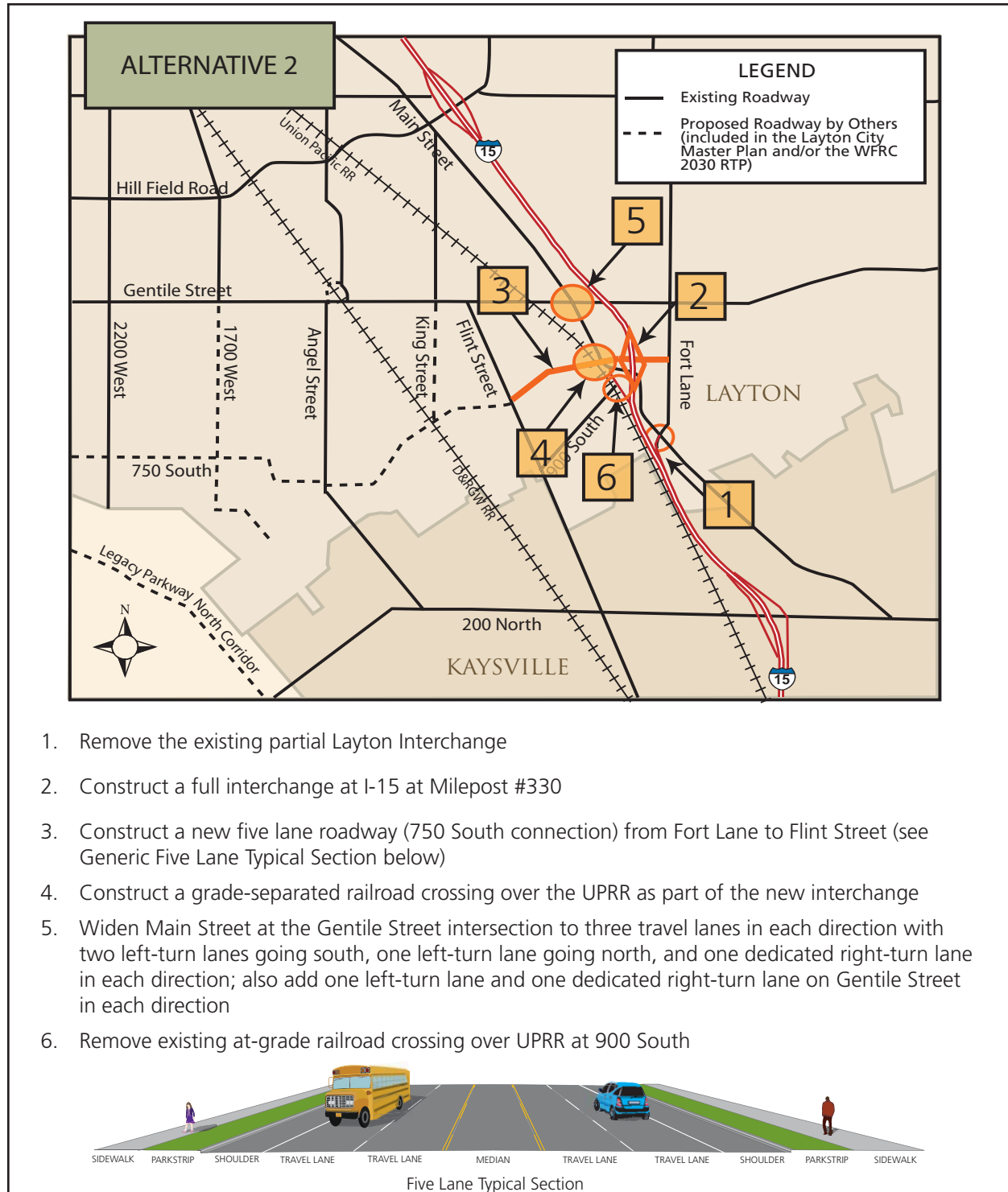


Figure ES-5. Preferred Alternative

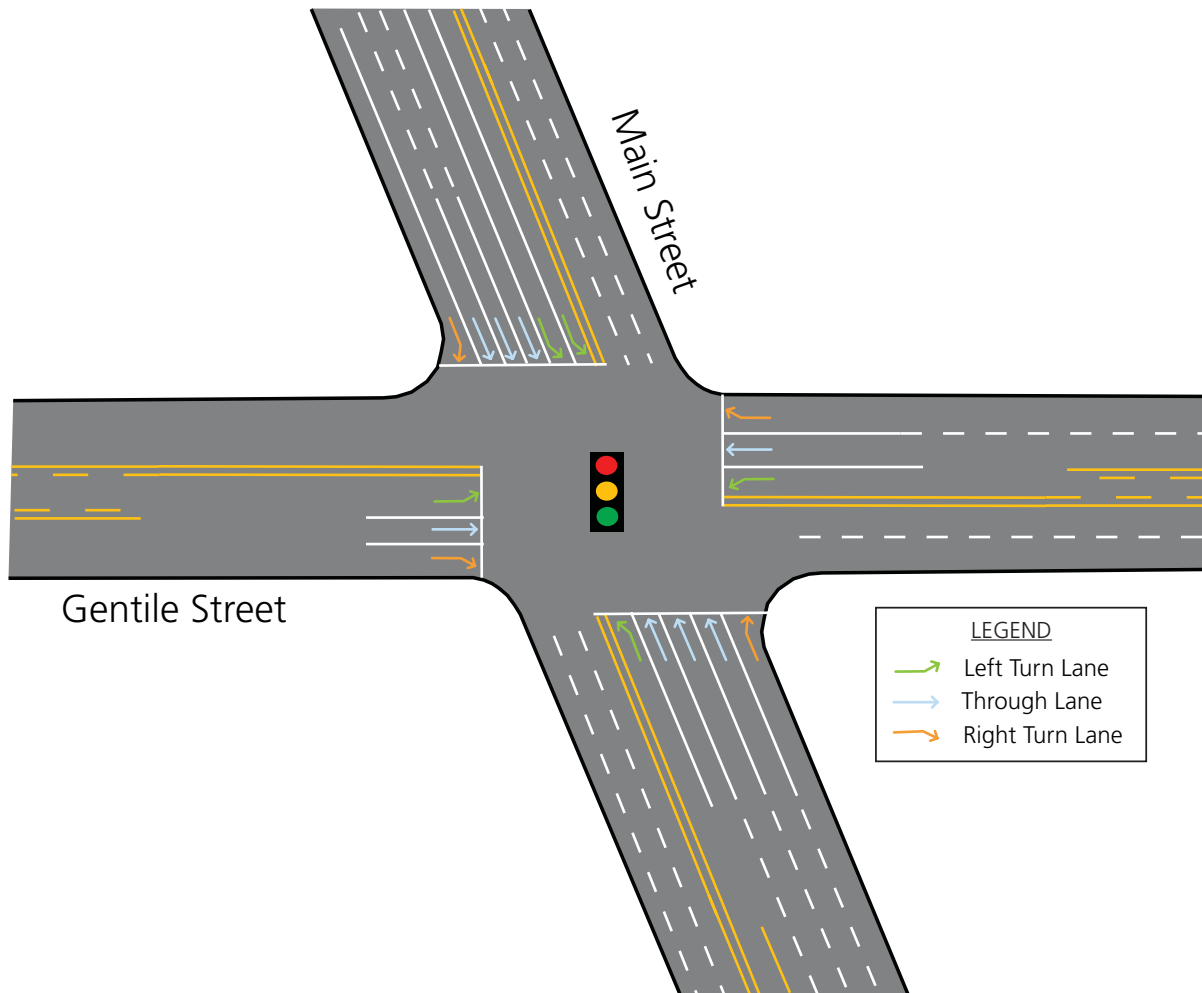













Figure ES-6. Gentile Street and Main Street Intersection










What are the environmental consequences of the project?

A brief summary of the impacts to the human and the natural environment that are anticipated to result from the selection of the Preferred Alternative are shown in Table ES-2. The No-action Alternative is used as the baseline for discussing these impacts.

Table ES-2. Environmental Consequences of the Preferred Alternative and the No-action Alternative

Environmental Issue	No-action Alternative	Preferred Alternative
 <p>Land Use</p>	<ul style="list-style-type: none"> No immediate conversion of property to roadway use. Parks and recreation areas not affected. 	<ul style="list-style-type: none"> Approximately 19 acres of commercial property converted to roadway use. Approximately 11 acres of agricultural land converted to roadway use. Parks and recreation areas not affected.

Environmental Issue	No-action Alternative	Preferred Alternative
 <p>Farmlands</p>	<ul style="list-style-type: none"> No immediate conversion of farmland to roadway use. No prime, unique, or statewide important farmlands impacted. 	<ul style="list-style-type: none"> Approximately 11 acres converted to transportation use. No prime, unique, or statewide important farmlands impacted.
 <p>Social Conditions</p>	<ul style="list-style-type: none"> Existing social trends and conditions continue. Increased traffic congestion. 	<ul style="list-style-type: none"> Existing social trends and conditions continue. Five residential relocations. Temporary construction impacts.
 <p>Environmental Justice</p>	<ul style="list-style-type: none"> No disproportionately high or adverse impact to Environmental Justice populations. 	<ul style="list-style-type: none"> No disproportionately high or adverse impact to Environmental Justice populations.
 <p>Relocations</p>	<ul style="list-style-type: none"> No immediate relocations. 	<ul style="list-style-type: none"> Five residential relocations. Up to 11 commercial relocations.
 <p>Economic Conditions</p>	<ul style="list-style-type: none"> Existing economic trends and conditions continue. Anticipated economic redevelopment of Main Street. 	<ul style="list-style-type: none"> May accelerate anticipated economic redevelopment of Main Street. Up to 11 commercial relocations.
 <p>Pedestrians and Bicyclists</p>	<ul style="list-style-type: none"> WFRC Bicycle Plan calls for various Class I, II and III bicycle routes along portions of the project area. 	<ul style="list-style-type: none"> Improve sidewalks on Main Street and construct sidewalk on 750 South. Add Class II bicycle route on 750 South connection.
 <p>Noise</p>	<ul style="list-style-type: none"> Increased noise averaging 2 dBA. 	<ul style="list-style-type: none"> Increased noise along I-15 and the 750 South connection, ranging between 2 and 10 dBA. Temporary construction noise.
 <p>Cultural Resources</p>	<ul style="list-style-type: none"> No impact. 	<ul style="list-style-type: none"> Three historic properties would have an "Adverse Effect" determination. Three additional historic properties would have a "No Adverse Effect" determination.
 <p>Hazardous Waste</p>	<ul style="list-style-type: none"> No impact. 	<ul style="list-style-type: none"> No impact.
 <p>Visual Conditions</p>	<ul style="list-style-type: none"> Existing visual trends and conditions continue. 	<ul style="list-style-type: none"> 30-ft high overpass structure at the south end of Main Street. New roadway (750 South connection).

Environmental Issue	No-action Alternative	Preferred Alternative
 Air Quality	<ul style="list-style-type: none"> Decrease in vehicle emissions due to improved standards Not expected to cause new violations of CO or PM₁₀ NAAQS. 	<ul style="list-style-type: none"> Meets the regional air quality conformity requirements Not expected to cause new violations of CO or PM₁₀ NAAQS
 Water Quality	<ul style="list-style-type: none"> Existing water quality trends and conditions continue. 	<ul style="list-style-type: none"> Increase in storm water runoff from 4 cfs to 17 cfs.
 Floodplains	<ul style="list-style-type: none"> No impact. 	<ul style="list-style-type: none"> No impact.
 Wildlife	<ul style="list-style-type: none"> No impact. 	<ul style="list-style-type: none"> No impact.
 Threatened and Endangered Species	<ul style="list-style-type: none"> No impact. 	<ul style="list-style-type: none"> No impact.
 Wetlands	<ul style="list-style-type: none"> No impact. 	<ul style="list-style-type: none"> Approximately 1 acre lost.
 Invasive Species	<ul style="list-style-type: none"> No impact. 	<ul style="list-style-type: none"> No impact.
 Wild and Scenic Rivers	<ul style="list-style-type: none"> No impact. 	<ul style="list-style-type: none"> No impact.
 Energy	<ul style="list-style-type: none"> No energy required for construction Lower operational energy requirements from less vehicle miles traveled in project area 	<ul style="list-style-type: none"> Energy required for construction. Higher operational energy expenditure from increased vehicle miles traveled in project area

Are there any Section 4(f) resources in the area?

Six parks, the Bamberger Trail and the UPRR are located in or near the project area. There are also 43 historic structures in the project area that were identified. The eligibility determinations for the National Register of Historic Places (NRHP) and the SHPO ratings for the structures are found in Chapter 3 - Section 3.1.9 - Cultural Resources.

Would any alternative avoid impacts to Section 4(f) properties?




No alternative that would meet the Purpose and Need for the project would completely avoid impacts to Section 4(f) properties. The No-action, the TSM/TDM, the Transit, the TSM/TDM/Transit Alternatives, and Build Alternative 5 would avoid impacts to Section 4(f) properties, but would also not meet the Purpose and Need for the project. Build Alternative 1 would impact several Section 4(f) resources along 200 North and along either Angel Street or Flint Street, depending on which street was selected to be widened. Build Alternative 1 would also not meet the Purpose and Need for the project. See Chapter 2 - Alternatives Screening.




Build Alternatives 3 and 4 would impact Section 4(f) properties along Gentile Street. Both Build Alternatives 3 and 4 would have similar impacts to Section 4(f) resources due to the only real variation between them being the full versus partial interchange on I-15. Build Alternative 2 would impact Section 4(f) properties along Main Street. All of the alternatives, with the exception of Build Alternatives 2 and 4, were eliminated from further consideration due to failure to meet the Purpose and Need for the project. See Chapter 2 - Alternatives Screening and Chapter 4 - Section 4(f) Evaluation.

How does the Preferred Alternative impact Section 4(f) properties?

The Preferred Alternative would not require any right-of-way from any of the parks nor would it impact the trail or the railroad. Six Section 4(f) properties would be impacted by the Preferred Alternative. A summary of these impacts is found in Table ES-3.

Table ES-3. Preferred Alternative Impacts to Section 4(f) Properties

Property	Residential or Commercial	Impact
 Doug & Emmy's Restaurant 200 South Main Street	Commercial	<ul style="list-style-type: none"> Structure would not be removed. Access to the historic structure would be lost due to the higher elevation of Main Street. "Adverse Effect" determination.
 225 South Main Street	Residential	<ul style="list-style-type: none"> Widening of Main Street would require 0.04-ac of property. Structure would not be removed. New access road would be provided. "No Adverse Effect" determination.
 Two Men and a Truck 255 South Main Street	Commercial	<ul style="list-style-type: none"> Widening of Main Street would require 0.03-ac of property. Structure would not be removed. New access road would be provided. "No Adverse Effect" determination.

Property	Residential or Commercial	Impact
 Candy Campus Daycare 265 South Main Street	Commercial	<ul style="list-style-type: none"> Widening of Main Street would require 0.9-ac of property. Structure would not be removed. New access road would be provided. "No Adverse Effect" determination.
 Sill's Cafe 281 South Main Street	Commercial	<ul style="list-style-type: none"> Widening of Main Street would require 1.6-ac of property. Property also includes 287 South Main Street (residence). Structure would be removed. "Adverse Effect" determination.
 287 South Main Street	Residential	<ul style="list-style-type: none"> Widening of Main Street would require 1.6-ac of property. Property also includes 281 South Main Street (Sill's Cafe). Structure would be removed. "Adverse Effect" determination.

Are there any areas of controversy?

The potential for public controversy over this project was an important factor in the decision to prepare an EIS. Coordination with the public has been ongoing and consistent to help identify and anticipate any issues that may be controversial with the project. Public input was taken on the Purpose and Need for the project and on the range of alternatives to be evaluated, which helped identify the issues that the public had with regards to this project and their ideas as to possible solutions.

Residents may still have issues with regards to changes in traffic patterns because of project implementation (such as the closure of the 900 South at-grade railroad crossing, the reconfiguration of the Larson Lane access, and the connection of 200 East to the 750 South connection), as well as noise impacts that are unable to be mitigated. The majority of the issues raised at the public meetings were concerned not with the project itself, but with the other planned roadways in the area that are part of the No-action Alternative. Some residents and business owners may have issues with regards to the Main Street improvements relating to the expansion and elevation of the roadway and the limitation of access to their properties to a right-in/right-out access only.

What are the unresolved issues?

The major unresolved issue is the property along the east side of Main Street that was once used as roadway and is now being used as parking. Ownership of this section of roadway is unclear and is in the process of being investigated.

Are there any other required governmental actions?

- Storm Water General Permit for Construction Activities:** A permit which grants authorization to discharge under the Utah Pollutant Discharge Elimination System (UPDES) is required for projects that disturb more than five acres of surface area during construction. As part of the requirements for this permit, a Storm Water Pollution Prevention Plan (SWPPP) will be developed and incorporated

into the final design of this project. A Notice of Intent (NOI) form will be submitted to the Utah Department of Water Quality (UDWQ) prior to any construction. Upon completion of the proposed project, a Notice of Termination (NOT) will be submitted to the same agency.

- **Section 404 of the Clean Water Act - Wetland Permit:** The proposed project needs to comply with Section 404(b)(1) guidelines. A Section 404 Permit is required for discharging any material or dredging below the ordinary high water mark in waters of the United States, including wetlands. Wetlands will be impacted by the Preferred Alternative (see Section 3.6.1 - Wetlands) and may require an Individual Permit from the United States Army Corps of Engineers (USACE).
- **Air Quality Permit for Construction Activities:** A permit for air quality impacts during construction is required to control fugitive dust and emissions. This permit would be obtained from the Utah Department of Air Quality (UDAQ) by the contractor prior to the start of construction.
- **Railroad Crossing Permit:** A permit for construction of the grade-separated railroad crossing would be required from the UPRR prior to the start of construction.
- **Cultural Requirement:** A Memorandum of Agreement between FHWA, UDOT, SHPO, Layton City and the Advisory Council (should they desire to be included), in accordance with Section 106 agreements, to resolve adverse effects to historic properties will be prepared and agreed upon.
- **FHWA Interchange Justification Report:** FHWA will review the proposed project to determine if an interchange is justified.